

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Forest
Site ID: F070XB001NM
Site Name: *Populus fremontii*-*Populus sargentii* Rio Grande cottonwood/Plains cottonwood
Major Land Resource Area and Common Resource Area MLRA 70 CRC CP-2
Precipitation or Climate Zone: 11-15"
Phase: _____

ORIGINAL SITE DESCRIPTION APPROVAL:

Site Date: July 1, 2002
Site Author: Steve Lacy
Site Approval: _____
Approval Date: _____

REVISIONS:

Revision Date: _____
Revisor: _____
Revision _____
Approval: _____
Approval Date: _____
Revision Notes: _____

PHYSIOGRAPHIC FEATURES

Narrative:

Low gradient, braided, meandering river with some incision. Wide floodplain which may not be accessible during low to moderate flow events.

LAND FORM:

1. floodplain
2. terrace
3. _____

ASPECT:

1. _____
2. _____
3. _____

Elevation (feet)	Minimum 3,500	Maximum 3,700
Slope (percent)		
Water Table Depth (inches)		
Flooding:	Minimum	Maximum
Frequency		
Duration		
Ponding:	Minimum	Maximum
Depth (inches)		
Frequency		
Duration		

Runoff Class:

CLIMATIC FEATURES

Narrative:
Average annual precipitation 11-15", occurring mostly in the summer. Summers are warm to hot and the winters tend to be moderate with occasional cold periods.

Frost-free period (days):	Minimum 180	Maximum 200
Freeze-free period (days):		
Mean annual precipitation (inches):		

Monthly moisture (inches) and temperature (°F) distribution:

	Avg. Precip. In.	Avg. Snowfall Total	Temp. Min.	Temp. Max.
January	0.39	2.0	20.6	56.7
February	0.41	2.2	25.2	62.6
March	0.37	2.4	31.4	69.8
April	0.46	-	40.4	78.8
May	1.05	-	49.7	87.0
June	1.42	-	59.2	95.0
July	2.14	-	63.4	95.9
August	2.15	-	61.6	94.0
September	1.71	-	54.1	87.6
October	1.29	0.1	40.8	78.1
November	0.53	0.6	28.4	65.5
December	0.49	2.0	21.0	57.3

Climate Stations:

			Lat	Long		Period		
Station ID	Bitter Lake WL Refuge	Location	3329	10424	From:	1950	To:	1987
Station ID	Bitter Lake WL Refuge	Location	3328	10424	From:	1987	To:	1999
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	

INFLUENCING WATER FEATURES

Narrative:

The Pecos river has a regulated flow through this area. There is some supplementary flow in the side drainage's to flood low bars.

Wetland description:

System	Subsystem	Class
	←	

If Riverine Wetland System enter Rosgen Stream Type:

C-5

REPRESENTATIVE SOIL FEATURES

Narrative:

These soils are found on floodplains and have a slope of 0-1%. The Glendale is deep and well drained. It formed in calcareous alluvium. Permeability is moderately slow. The Harkey soil is deep and well drained, with moderate permeability. It formed in calcareous alluvium. The Ustifluvents flood frequently, have deep soils and are somewhat poorly drained. They formed alluvium.

Parent Material Kind: alluvium

Parent Material Origin: _____

Surface Texture:

1. _____

2. _____

3. _____

Surface Texture Modifier:

1. _____

2. _____

3. _____

Subsurface Texture Group: _____

Surface Fragments $\leq 3''$ (% Cover): _____

Surface Fragments $> 3''$ (% Cover): _____

Subsurface Fragments $\leq 3''$ (%Volume): _____

Subsurface Fragments $\geq 3''$ (%Volume): _____

Minimum

Maximum

Drainage Class: _____

Permeability Class: _____

Depth (inches): _____

Electrical Conductivity (mmhos/cm): _____

Sodium Absorption Ratio: _____

Soil Reaction (1:1 Water): _____

Soil Reaction (0.1M CaCl₂): _____

Available Water Capacity (inches): _____

Calcium Carbonate Equivalent (percent): _____

Soil survey associations:

This ecological site is associated with the map units and soil components in the following soil surveys. Future updates to this soil survey may affect these associations. For up-to-date associations between soil components and this ecological site, refer to NASIS. Associations between ecological sites and soil components are maintained in NASIS via the ecological site ID.

MAP UNIT NAME

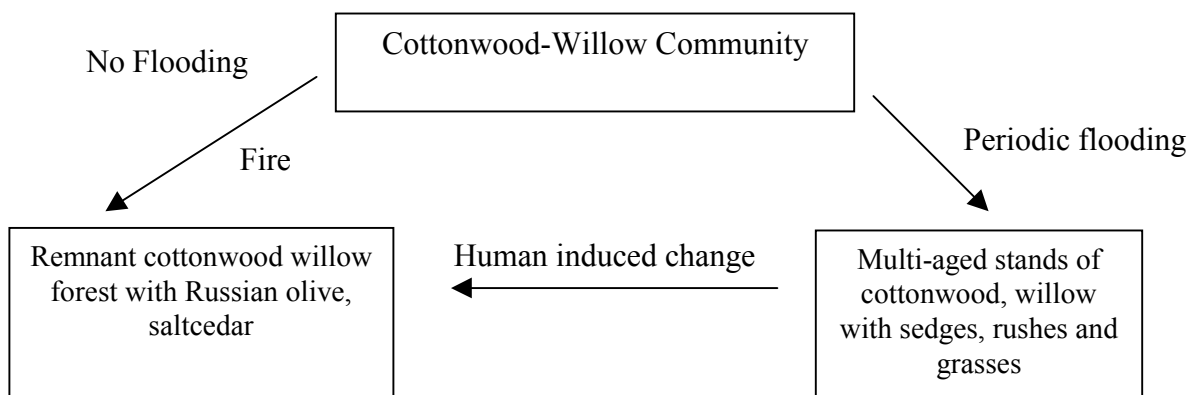
<u>Soil survey</u>	<u>Map unit symbol</u>	<u>Soil components</u>
Chavez county	GHA	Glendale
New Mexico		Ustifluvents
Northern part		Harkey

PLANT COMMUNITIES

Ecological Dynamics of the Site:

Riparian vegetation germinates on moist mineral soils. As the seasonal flooding occurs, the river channel moves, thus allowing for the establishment of new stands of cottonwoods and willows. Various age class stands of woody vegetation can be found across the floodplain. Overflow ponds, cutoff chutes and wet areas also provide areas for regeneration of new plants.

Plant Communities and Transitional Pathways (diagram)



Interpretive Plant Community: Naturalized Community

Ground Cover and Structure:

Cover Type	Percent Ground Cover by Height Class (feet)								
	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	Scientific Name	Percent Composition (percent by frequency)
Rio Grande cottonwood	<i>Populus fremontii</i>	
Plains cottonwood	<i>Populus sargentii</i>	
Total		

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

Common Name	Scientific Name	Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		80		90		100	
		%	lbs	%	lbs	%	lbs
Coyote willow	<i>Salix exigua</i>						
Baccharis	<i>Baccharis glutinosa</i>						
Total Annual Production							

Typical Climax Community:

Scattered large Rio Grande and Plains cottonwoods with even aged stands of replacement trees. Understory and openings containing Coyote willow with some baccharis. Streambank has sedges, rushes and grasses.

Plant Community: (as it exists today)

Small stand of Rio Grande cottonwoods, with Seepwillow and Coyote willow stands on the banks. Also common are Saltcedar, and Russian olive. Alkali sacaton and threesquare are found as groundcover. Rio Grande cottonwood seedlings are present.

Ground Cover and Structure:

Cover Type	Percent Ground Cover by Height Class (feet)								
	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

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Total		

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

Common Name	Scientific Name	Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		75		85		95	
		%	lbs	%	lbs	%	lbs
Coyote willow	<i>Salix exigua</i>						
Baccharis	<i>Baccharis glutinosa</i>						
Total Annual Production							

Plant Community: (as it exists today)

Handbook of Wetland Vegetation Communities of New Mexico Volume II. PP 54-61

ECOLOGICAL SITE INTERPRETATIONS

Forest Site Productivity

Common Name	Scientific Name	Annual Productivity (per acre per year)						
		Site Index		Cubic Feet (CMAI)		Other Units		
		Low	High	Low	High	Low	High	Unit

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Map Unit Name

Soil Survey

Chavez county
New Mexico
Northern part

Map Unit Symbol

GHA

Soil Components

Glendale
Ustifluvents
Harkey

ECOLOGICAL SITE INTERPRETATIONS

Animal Community:

Blacktailed jackrabbit, pocket gopher, coyote, scaled quail, raccoon grayfox, muskrat, sandhill crane, golden eagle.

Plant Preference by Animal Kind:

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Hydrology Functions:

A riparian woodland should act as an energy absorbing and sediment collecting area. Energy disruption is accomplished by roughness provided by grass, tree trunks, and debris.

Recreational Uses:

1. Birdwatching
2. Hiking

Wood Products:**Other Products:****Other Information:****Supporting Information**Associated Sites:Site NameSite IDSite NarrativeSimilar Sites:Site NameSite IDSite Narrative

Inventory Data References (narrative):

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Inventory Data References:

<u>Data Source</u>	<u>Number of Records</u>	<u>Sample Period</u>	<u>State</u>	<u>County</u>
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State Correlation:

This site has been correlated with the following sites: _____

Type Locality:

State:	New Mexico
County:	Chavez
Latitude:	UTM N 3743180
Longitude:	UTM E 565430
Township:	T05S
Range:	R25E
Section:	35

Is the type locality sensitive? Yes ☐ No ☐

General Legal Description: _____

Relationship to Other Established Classifications:

Other References: